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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,864	07/14/2003	Hiroshi Shigetaka	9281/4602	6963
7590 Brinks Hofer Gilson & Lione P. O. Box 10395 Chicago, IL 60610			EXAMINER HOLTON, STEVEN E	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 12/20/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	Application No. 10/618,864	Applicant(s) SHIGETAKA, HIROSHI	
	Examiner Steven E. Holton	Art Unit 2629	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 07 November 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 1-3 and 8-12.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
 13. ☒ Other: See Continuation Sheet.

AMR A. AWAD
SUPERVISORY PATENT EXAMINER
Amr Ahmed Awad

Continuation of 13. Other: Claims 1-3 and 8-12 would be rejected under 35 USC 103(a) based on the previously presented prior art of Gerpheide et al. (USPN: 6680731) in view of Gerpheide (USPN: 5861875).

Regarding independent claims 1 and 8, Gerpheide in the '731 patent discloses a touch sensitive input device formed on a flexible substrate (col. 5, lines 24-28 and lines 55-58), and the substrate having an extension (Fig. 10A, elements 82 and 84) with a circuit substrate provided in the extension (Fig. 10A, element 82). Regarding the bonding of the touch sensor to a reverse side of a support plate, Gerpheide discloses attaching the touchpad to the underside of the cover of a keyboard case (col. 4, lines 8-12; col. 5, lines 61-62; and col. 7, lines 30-33). The Examiner agrees that the '731 patent does not specifically use the term 'bonding' but does use adhering (col. 5, line 61) and attaching (col. 6, line 31) to describe the connection between the touchpad and the keyboard cover. The Examiner interprets this action to read on the concept of 'bonding' based on the '731 patents teaching to directly attach the touchsensor to the underside of the keyboard cover for support. The '731 patent also notes the top plate can be 'arcuate' (col. 4, line 10) which indicates a curved support plate could be used.

However, the '731 patent does not expressly discuss the layout of the sensor electrodes or the specific use of insulating layers. The '731 does disclose using touch sensors developed by the '731 patent assignee, the Cirque Corporation.

Gerpheide in the '875 patent discloses a touchpad input sensor owned by the Cirque Corporation that provides a capacitive touchpad sensor that includes a flexible insulating substrate (Fig. 8a, element 380) with a grid of electrodes applied to the underside of the substrate (Fig. 8a, element 130 directly below element 380). Underneath the first set of electrodes is an insulating layer (Fig. 8a, element 370) and finally a second set of electrodes aligned in the opposite direction (Fig. 8a, element 130). The layout of the electrodes is shown in more detail in Fig. 8b. The '875 patent further shows the touchpad being attached underneath a keyboard body surface (Fig. 2).

At the time of invention it would have been obvious to one skilled in the art to combine the teachings of Gerpheide in the '731 and '875 patents to produce a device as described in claims 1 and 8. The '731 patent provides a flexible touch sensor that is bonded to the reverse side of a curved support plate and the '875 patent provides a electrostatic capacitance type touch input sensor using arrays of X and Y electrodes formed on a substrate with an insulating layer. It would have been logically obvious to use the suggestion of the '731 patent to use touch sensors produced by the Cirque Corporation, such as the touch sensor described in the '875 patent. Thus, it would have been obvious to combine the teachings of the '731 patent and the '875 patent to produce an input device as described in claims 1 and 8.

Regarding claims 2 and 10, Gerpheide et al. discloses fitting the touch sensor to the underside of a curved surface such as the wrist rest of a keyboard (col. 5, lines 12-14). This would be a recessed area of the surface to hold the input sensor area.

Regarding claim 9, Gerpheide et al. discloses fitting the touch sensor on the underside of arcuate surfaces (col. 5, lines 16-18).

Regarding claim 3, Gerpheide et al. discloses highlighting the area on the housing or support surface that is above the touch area so that a user is able to determine where the touch sensor is located (col. 5, line 64 – col. 6, line 2).

Regarding claims 11 and 12, Gerpheide et al. discloses that the PC board is preferably attached beneath the flexible substrates of the touchpad to reduce the overall area needed to attach the touchpad inside the casing (col. 7, lines 25-41). Therefore, it would be a matter of design choice for one skilled in the to fold the PC board underneath the flexible substrates as shown by Gerpheide et al. or to connect the PC board to the underside of the casing next to the flexible substrates.

Regarding the Applicant's arguments of the bonding to a support plate and the '731 teaching a lack of a support plate. As mentioned above, the '731 patent discusses adhering and attaching the flexible substrates of the sensor to the reverse side of a keyboard casing. The Examiner finds the adhering of the touch sensor and the keyboard case to teach the idea of bonding the two elements to each other. The '731 patent discusses the lack of a support plate (col. 5, line 60) to discuss the lack of need of a support plate placed beneath the substrates of the touchpad, rather the keyboard housing is used as the support plate of the touchpad sensor. The current application similarly uses the support plate as the physical housing of a laptop computer keyboard area such as shown in Figs. 4 and 5 of the current application. Therefore, the Examiner finds that the combination of the '731 and '875 patents to Gerpheide et al. read on claims 1-3 and 8-12 as currently amended.